

ABSTRACT

Halogenated carboxylic ester derivatives of phenylethyl imidazole, and their method of preparation are disclosed. Radio-halogenated forms of these compounds are ideally suited for positron-imaging of the adrenal glands, as it is known that these compounds demonstrate a selective and high rate of accumulation in the adrenals. The method of preparing these derivatives proceeds by the conversion of a stable, non-radioactive intermediate having trialkylstannyl leaving groups. These intermediates are efficiently converted to the corresponding halogenated forms by substitution of the trialkylstannyl group with the halogen or radiohalogen.